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| 10/573,698 | 12/07/2006 | Willibald Konrath | 4015-5819 | 7114 |
| 24112 7590 09/18/2008 COATS & BENNETT, PLLC 1400 Crescent Green, Suite 300 Cary, NC 27518 | | | | |
| EXAMINER | | | | |
| KASENGE, CHARLES R | | | | |
| ART UNIT | | PAPER NUMBER | | |
| 2121 | | | | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/573,698

Applicant(s)

KONRATH ET AL.

Examiner

CHARLES R. KASENGE

Art Unit

2121

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 March 2006.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15-29 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 15-29 is/are rejected.
7) ☒ Claim(s) 21 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 27 March 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-8508)
Paper No(s)/Mail Date 6/26/06
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

Claim Objections

1. Claim 21 is objected to because of the following informalities: the claim should end in a period not a semi-colon. Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 15-29 are rejected under 35 U.S.C. 102(b) as being anticipated by Konrath et al. WO 2005/032221.
4. Regarding claim 15, Konrath discloses a method of manufacturing a high-frequency assembly having a plurality of components, at least one of which is frequency-specific, using an automatic assembly apparatus, the method comprising: identifying a frequency-encoding feature on a frequency-specific component; accepting the frequency-specific component for connection to the high-frequency assembly if the frequency-encoding feature indicates that the frequency-specific component is a correct component for the assembly; and rejecting the frequency-specific component for connection to the high-frequency assembly if the frequency-encoding feature indicates that the frequency-specific component is not the correct component for the assembly (pg. 12, claim 1).

Regarding claim 16, Konrath discloses the method of claim 15 wherein the frequency-

specific component is taken from a stock that comprises a plurality of frequency-specific components, the method further comprising: rejecting the entire stock of frequency-specific components if a predetermined number of frequency-specific components in the stock are successively rejected for connection (pg. 12, claim 2).

Regarding claim 17, Konrath discloses the method of claim 15 further comprising: searching for the frequency-encoding feature at a plurality of locations on the frequency-specific component; and determining an orientation of the frequency-specific component based on a location at which the frequency-encoding feature is found (pg. 12, claim 3).

Regarding claim 18, Konrath discloses the method of claim 17 further comprising: identifying a reference point and a reference direction on the frequency-specific component; forming a number of vectors beginning at the reference point, the vectors being of substantially equivalent length and forming pre-defined angles with respect to the reference direction; and searching for the frequency-encoding feature at the ends of the vectors (pg. 12-13, claim 4).

Regarding claim 19, Konrath discloses the method of claim 18 wherein each vector includes an end that terminates at a corner of a square (pg. 13, claim 5).

Regarding claim 20, Konrath discloses the method of claim 18 further comprising: determining a rotational position of the frequency-encoding feature; and distinguishing which of a plurality of features is indicated by the frequency-encoding feature based on the orientation of the frequency-specific component (pg. 13, claim 6).

Regarding claim 21, Konrath discloses the method of claim 15 further comprising: detecting an outline of the frequency-specific component; locating the frequency-encoded feature based on the detected outline of the frequency-specific component; and determining an

orientation of the frequency-specific component based on the located frequency-encoded feature (pg. 13, claim 7).

Regarding claim 22, Konrath discloses the method of claim 15 wherein the frequency-specific component comprises a circuit board (pg. 13, claim 8).

Regarding claim 23, Konrath discloses the method of claim 22 wherein the frequency-encoded feature comprises a conductive material (pg. 13, claim 9).

Regarding claim 24, Konrath discloses the method of claim 15 wherein the frequency-specific component comprises a mechanical component (pg. 14, claim 10).

Regarding claim 25, Konrath discloses the method of claim 24 wherein the mechanical component comprises a cover that covers a mounted component (pg. 14, claim 10).

Regarding claim 26, Konrath discloses the method of claim 15 wherein the frequency-encoded feature comprises a bore (pg. 14, claim 11).

Regarding claim 27, Konrath discloses the method of claim 15 wherein the frequency-encoded feature comprises an indication printed on the frequency-specific component (pg. 14, claim 12).

Regarding claim 28, Konrath discloses a frequency-specific component for a high-frequency assembly comprising: a machine-detectable feature on the frequency-specific component; and the machine-detectable feature being disposed on the frequency-specific component to indicate a specific operating frequency of the component (pg. 14, claim 13).

Regarding claim 29, Konrath discloses a manufacturing apparatus for the automatic manufacture of a high-frequency assembly comprising: a placing apparatus to place one or more components on a high-frequency assembly, wherein at least one of the components comprises a

frequency-specific component; a sensor to detect a frequency-encoded feature associated with the frequency-specific component that indicates an operating frequency of the frequency-specific component; a controller operatively connected to the sensor and configured to: receive a signal from the sensor responsive to the detection of the frequency-encoded feature; and control the placing apparatus to place the frequency-specific component on the assembly, or to reject the frequency-specific component based on the received signal (pg. 14, claim 14).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHARLES R. KASENGE whose telephone number is (571)272-3743. The examiner can normally be reached on Monday through Friday, 8:30 - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert DeCady can be reached on 571 272-3819. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/573,698
Art Unit: 2121

Page 6

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September 15, 2008

/Charles R Kasenge/
Examiner, Art Unit 2121